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APPLICATION NO.	FILING DAT	E	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/606,127	06/26/2003		Jin-Tae Kim	053785-5117	3643
9629	7590 10/0	05/2004		EXAM	INER
1.10110111	LEWIS & BOC	WANG, GEORGE Y			
1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004				ART UNIT	PAPER NUMBER
				2871	

Please find below and/or attached an Office communication concerning this application or proceeding.

		146				
	Application No.	Applicant(s)				
	10/606,127	KIM ET AL.				
Office Action Summary	Examiner	Art Unit				
	George Y. Wang	2871				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>25 August 2004</u> .						
2a) This action is <b>FINAL</b> . 2b) ⊠ This	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
<ul> <li>4)  Claim(s) 1-21 is/are pending in the application.</li> <li>4a) Of the above claim(s) 11-21 is/are withdraw</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-6,9 and 10 is/are rejected.</li> <li>7)  Claim(s) 7 and 8 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or</li> </ul>	n from consideration.					
Application Papers						
<ul> <li>9) The specification is objected to by the Examiner</li> <li>10) The drawing(s) filed on 26 June 2003 is/are: a)</li> <li>Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction</li> <li>11) The oath or declaration is objected to by the Example 1</li> </ul>	☑ accepted or b)☐ objected to drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). sected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the priority application from the International Bureau</li> <li>* See the attached detailed Office action for a list of</li> </ul>	have been received. have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachmant(a)						
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Summary					
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ul>	Paper No(s)/Mail Da 5) Notice of Informal P	ite atent Application (PTO-152)				

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

Paper No(s)/Mail Date \_

6) Other: \_\_\_\_.

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### **DETAILED ACTION**

#### Election/Restrictions

1. Applicant's election of Claims 1-10 in the reply filed on August 25, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

# Specification

2. The abstract of the disclosure is objected to because it is too long. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. Correction is required. See MPEP § 608.01(b).

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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- 4. Claims 1-6 and 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Kwon et al. (U.S. Patent No. 6,671,010, hereinafter "Kwon").
- As to claim 1, Kwon discloses a liquid crystal display (LCD) device having an array substrate comprising a substrate (fig. 6j, ref. 100), a gate line (fig. 6i, ref. 102) and data line (fig. 6i, ref. 120) on the substrate that cross each other to define a pixel area (fig. 6e, ref. P), a thin film transistor (TFT) (fig. 6i, ref. T) electrically connected to the gate and date lines and including a gate electrode (fig. 6j, ref. 101), a source electrode (fig. 6j, ref. 112) over the gate electrode and connected to the data line, a drain electrode (fig. 6j, ref. 114) spaced apart (fig. 6i, ref. CH) from the source electrode, and a semiconductor layer (fig. 6f, ref. 116) having an active layer over the gate electrode and a first extended portion completely covered (fig. 6i, ref. M) with the drain electrode at a boundary between the active electrode and the first extended portion, where the first extended portion is disposed over the gate electrode, and a pixel electrode (fig. 6j, ref. 117) in the pixel region and connected (fig. 6j, ref. 119) to the drain electrode.

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6. Regarding claims 2-3, Kwon discloses the LCD as recited above where the source electrode has a U-shape (fig. 6i, ref. 112; col. 6, lines 55-59) and surrounds a part of the drain electrode (fig. 6i, ref. 114a), which has a rod shape.

- 7. <u>As per claim 4</u>, Kwon discloses the LCD as recited above further comprising a second extended portion (fig. 6e, ref. 116a) corresponding to the data line (fig. 6e, ref. 120) in the semiconductor layer.
- 8. As to claims 5 and 9-10, Kwon discloses the LCD as recited above further comprising a doped semiconductor layer (fig. 6f, ref. 118) between the semiconductor layer (fig. 6f, ref. 116) and the source electrode (fig. 6f, ref. 112) and between the semiconductor layer (fig. 6f, ref. 116) and the drain electrode (fig. 6f, ref. 114a) in the TFT and where the semiconductor layer is formed of amorphous silicon and the doped semiconductor layer is formed of doped amorphous silicon (col. 9, lines 38-42).
- 9. Regarding claim 6, Kwon discloses the LCD as recited above where the first extended portion at the boundary with the active layer has a width narrower than the active layer (fig. 6i, ref. M).

Allowable Subject Matter

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10. Claims 7-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to specifically disclose an LCD device particularly having a first extended portion where the width at the boundary with the active layer is in the range of about 2.8  $\mu$ m to about 3.4  $\mu$ m and where the drain electrode completely covering the first extended portion at the boundary with the active layer has a width in a range of about 4.5  $\mu$ m to about 5.6  $\mu$ m.

### Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Y. Wang whose telephone number is 571-272-2304. The examiner can normally be reached on M-F, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gw

TARIFUR R. CHOWDHURY
PRIMARY EXAMINER